IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Wotring, et al.	Art Unit: 2177
Application No.: 09/681,936	Examiner: Srirama T. Channavajjala
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Title: SYSTEM AND METHOD FOR SHARING DATA BETWEEN RELATIONAL AND HIERARCHICAL DATABASES	

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE UNDER 37 CFR 1.111

Introductory Comments

Dear Sir:

The following is in response to the Office Communication of June 10, 2004.

Drawings

As stated in Applicants' response of April 27, 2004 to the Office Communication of December 12, 2003, a set of formal replacement drawings were submitted with the response under a separate drawing transmittal letter.

Double Patenting

A terminal disclaimer in compliance with 37 CFR 1.321(c) is enclosed as Appendix A to overcome the nonstatutory double patenting rejection based on commonly owned U.S. Patent

No. 6,665,677. Also included in Appendix A are recorded assignment documents for the present application and U.S. Patent No. 6,665,677.

Response to Claim Rejections Under 35 U.S.C. § 102(a)

The Office has twice rejected the claims in Applicants' specification as being anticipated by the Sacks reference, U.S. Patent No. 5,974,407. Contrary to assertions by the Office, Applicants believe that the claims, as amended define over the Sacks reference. The Sacks reference neither structurally nor more generally suggest the claimed subject matter of Applicants' claimed invention. All the elements of Applicants' claims are not explicitly, implicitly, or inherently disclosed in the Sacks reference. Therefore the rejections are not supported by the cited art and should be withdrawn. Applicant requests reconsideration and examination of the application in view of the following discussion.

Status of Claims

In response to the first Office Communication of December 12, 2003, Applicants amended clams 1, 7, 9, 18, 24, 28, 30 and 32, and canceled claims 6, 8, 10, 23, 27, 29, and 31 to overcome rejections under 35 U.S.C. § 102(a), and to further distinguish Applicants' claimed invention over the references cited by the Office. Arguments were presented to rebut establishment of a *prima facie* case of unpatentability for lack of novelty. This communication is in response to the second and Final Office Communication of June 10, 2004. In the Final Office Communication, the Office once again rejected claims 1-5, 7, 9, 11-22, 24-26, 28, 30 and 32-34 based on similar reasoning that was used in the Office Communication of December 12, 2003. There are no claim amendments presented with this response. The current claims 1-34 are shown in APPENDIX B.

Status of Amendments

There are no outstanding amendments to the application. No amendments have been filed subsequent to final rejection.

Summary of the Invention

The current invention provides a method and system for transforming relational database information into a hierarchical data representation. It enables sharing between hierarchical and relational data structures without requiring the data to be remodeled to fit a common format or convention. The present invention does not rely on a relational database management system (RDBMS) or a hierarchical database management system (HDBMS) for implementing and restructuring relational data into a hierarchical structure. The only dependency upon the relational database management system is to access the relational data to be restructured by the present invention into a hierarchical structure. An embodiment of the present invention as in claim 1 relies on the defining of hierarchical data entities that include simple 104, 106 and compound 100-103, 105 elements (see page 11, line 21 through page 12, line 9 of the specification and Figure 1). The simple elements of the hierarchical data entities include entity paths 205, 305 and mapped fields 206, 306 and the compound elements of the hierarchical data entities include entity paths 201, database names 202, 302 database commands 203, 303 and database fields 204, 304 (see page 12, line 10 through page 16, line 14 of the specification and Figures 2 and 3). It relies on defined paths stored in the elements of a data entity rather than on relational database management composite keys and tables to provide structural connections between the root and simple elements of the hierarchical data structure and to maintain the hierarchical parent/child relationships within families (see page 16, line 15 through page 18, line 25 of the specification and Figures 4A and 4B). Each of the plurality of elements in the

hierarchical data entity is mapped (see page 21, line16 through page 22, line 8 of the specification and Figure 6) to information in a relational dataset (see page 19, line 1 through page 21, line 15 of the specification and Figure 5), including for each compound element, specifying a data source 504, specifying a database command 505, executing a database command 506, receiving database field names from a relational database and adding the database field names to the compound element 507. The mapping also requires that for each simple element, selecting a database field name in a parent element corresponding to the simple element 510 and specifying a data transformation algorithm associated with the simple element 511. The relational dataset information is transformed into corresponding mapped elements in the hierarchical data entity to form a hierarchical data structure (see page 22, line 9 through page 25, line 11 of the specification and Figures 7, 8A, 8B and 8C). The hierarchical data may be accessed for a hierarchical data structure 920, 925, 930 corresponding to the relational dataset information in the relational database 905, 910 (see page 25, line 12 through page 26, line 4 of the specification and Figures 9A and 9B). Although the result produced by the present disclosed invention may be similar to that produced by the Sacks reference cited by the Office, the method disclosed in the present disclosure of achieving the result is patentably distinguishable from that method disclosed in the Sacks reference.

Summary of the Cited Reference

The cited reference of Sacks describes a method for implementing a virtual hierarchical database within a relational database management system. Although the virtual hierarchical data appears be hierarchical, it is actually stored as relational data in the relational database management system and is accessed using relational database keys. The Sacks reference provides for managing rows of data in a virtual hierarchical database using a relational database

management system as the implementing apparatus. The invention uses one or more relational database management system tables to store rows of hierarchical data key fields and user data fields. Composite keys, used by relational database management systems and unique over all the tables, are used to maintain hierarchical families and maintain the hierarchical parent/child relationships within families. SQL select queries present hierarchical views of the virtual hierarchical data. The Sacks invention allows both a virtual hierarchical database and a relational database to be implemented in the same application using a single relational database management system to provide database services. It allows SQL statements to operate on both the virtual hierarchical database and relational database, and to operate on both hierarchical and relational tables together. The virtual hierarchical database table specifications and root and child condition specifications specified by a developer are stored in tables created in the relational database management system to access hierarchical data. Hierarchical keys that are unique among all the tables in the virtual hierarchical database are used to support the hierarchical structure. After the virtual hierarchical database management system is structured, the data may be accessed and stored in an actual hierarchical database management system. The systems and methods disclosed in the Sacks disclosure are heavily reliant on the features and capabilities of a relational database management system, and are patentably distinguishable over Applicants' disclosed invention.

Issues

The following issue is presented: Whether claims 1-5, 7, 9, 11-22, 24-26, 28, 30 and 32-34 are anticipated by Sacks (U.S. Patent No. 5,974,407).

Arguments

If examination at the initial stage does not produce a prima facie case of unpatentability,

then without more, the applicant is entitled to the grant of the patent. See *In re Oetiker*, 977 F. 2d 1443 (Fed. Cir. 1992). Under 35 U.S.C. § 102, anticipation requires that there is no difference between the claimed invention and reference disclosure, as viewed by a person of ordinary skill in the field of the invention. See *Scripps Clinic & Research Foundation v. Genentech, Inc.*, 927 F.2d 1565. Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim. In deciding the issue of anticipation, the trier of fact must identify the elements of the claims, determine their meaning in light of the specification and prosecution history, and identify corresponding elements disclosed in the allegedly anticipating reference. *See Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452.

In the present case, the Office asserts that Applicants' claims 1-5, 7, 9, 11-22, 24-26, 28, 30 and 32-34 are anticipated by Sacks (U.S. Patent No. 5,974,407). As more fully set forth below, Applicants contend that the findings of anticipation by the Office are clearly erroneous based on a failure to identify the elements of the claims, to determine their meaning in light of the specification, and to identify corresponding elements disclosed in the allegedly anticipating reference of Sacks. Applicants contend that the Office has not shown the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim. Therefore, the rejection of these claims should be withdrawn.

It should be noted that the differences between Applicants' invention and the Sacks reference arise from the fact that the Applicants' claimed invention does not rely on the features embedded in a relational database management system to produce a hierarchical data structure, while Sacks discloses a method that relies on linking keys between relational tables in a relational database management system to produce a virtual hierarchical data structure.

Applicants' disclosed invention is not limited to use with a relational database management system, but is capable of translating a relational data structure, absent a management system, into a hierarchical data structure without the use of a relational database management system. Applicants' invention relies on defined data paths and element names for determining hierarchical data structure, not composite keys unique over all tables in a relational database management system. Since the Office has failed to establish that there is no difference between the Applicants' claimed invention and the reference of Sacks, the Applicants requests withdrawal of the rejections and reconsideration of the patent with respect to the above-referenced claims.

Discussion of Independent Claim Rejections Under 35 U.S.C. § 102(a)

As noted above, there may be similarities between the hierarchical result produced by Applicants' claimed invention and the hierarchical result produced by the method disclosed in the Sacks reference, but the method used between the initiation and result of the two disclosures are patentably distinct from one another. That is, the means of accomplishing the result in the two disclosures are distinguishable from one another. This is evidenced by the fact that every element of Applicants' claimed invention, arranged as in the claims, are not found in the Sacks reference cited by the Office.

Regarding the first element of independent claims 1, 18 and 24 (previously presented), there is no teaching or suggestion in the Sacks reference for "defining a hierarchical data entity including a plurality of simple and compound elements, comprising: identifying an entity path and mapped fields in each simple element; and identifying an entity path, a database name, a database command, and database fields in each compound element". As disclosed in Applicants' invention in the descriptions of Figure 2 and Figure 3, the simple and compound elements of the hierarchical data entity include attributes for identifying paths, fields, database and commands

for accessing data in a relational database to be transformed into mapped elements in a hierarchical data structure. Unlike Applicants' method, the Sacks method relies on unique composite keys for maintaining hierarchical relationships of data stored in a relational database management system. There is no corresponding disclosure of this element, as arranged in Applicants' claimed invention, in the Sacks reference. The cited passages by the Office describe the Sacks method of using composite keys and hkey values created in rows and data storage tables for generating hierarchical views stored in tables created in a relational database management system. There exist no correspondence between Applicants' first element of independent claims 1, 18 and 24 and the Sacks disclosure, particularly defining a hierarchical data entity including a plurality of simple and compound elements comprising identifying an entity path and mapped fields in each simple element and identifying an entity path, a database name, a database command, and database fields in each compound element.

The Office asserts elements shown in Sacks Figure 3 as 3A-24, 3A-26 (there is no 3A-25 as identified by the Office) and 3A-12 disclose the first element of Applicants claim 1, 18 and 24 which includes defining a hierarchical data entity including a plurality of simple and compound elements comprising identifying an entity path and mapped fields in each simple element and identifying an entity path, a database name, a database command, and database fields in each compound element. The description of Figure 3 in Sacks may be found at column 10, line 35 through column 11, line 27. At column 10, line 41-42, Sacks discloses "Items 3A-10 through 3A-26 give tables, fields, primary keys and relationships of the diagram." At column 10, lines 48-50 Sacks disclose "3A-12 hChild - The table storing the root conditions and the child conditions." At column 11, lines 6-8 disclose "The two connectors 3A-24 and 3A-26 indicate that each of the two primary key elements in 3A-12 matches a hTable key in 3A-10." These

disclosed elements in the Sacks reference are functions, such as tables, primary keys and hTable keys, provided in a relational database management system. There is no disclosure of an entity path and mapped fields in each simple element, nor is there any disclosure of an entity path, a database name, a database command, and database fields in each compound element, as claimed by Applicants.

Regarding the second element of independent claims 1, 18 and 24 (previously presented), there is no teaching or suggestion in the Sacks reference for "mapping each of the plurality of elements in the hierarchical data entity to information in a relational dataset contained in a relational database, comprising: for each compound element, specifying a data source, specifying a database command, executing the database command, receiving database field names from the relational database, and adding the database field names to the compound element; for each simple element, selecting a database field name in a parent element corresponding to the simple element, and specifying a data transformation algorithm associated with the simple element". As disclosed in Applicants' invention, this second element of claims 1, 18 and 24 rely on the attributes defined in the first claim element to map the simple and compound elements to datasets in the relational database and to specify a transformation algorithm for the simple elements. The passage in Sacks cited by the Office discloses mappings between rows in the hierarchical database storage tables using composite keys (hTable, hKey, and hNode) shown in Figure 8 and the hierarchical views shown in Figure 9. For mapping, Applicants disclose in the second element of claims 1, 18 and 24, for each compound element, specifying a database command, executing the database command, receiving database field names from the relational database, and adding the database field names to the compound element. For each simple element, Applicants disclose selecting a database field name in a parent element corresponding

to the simple element, and specifying a data transformation algorithm associated with the simple element. There is no disclosure of theses elements in the cited passages of Sacks, and there is no corresponding element identified in the Sacks reference.

The Office asserts that the one-to-one mapping of rows shown between Figures 8B and 9A, mapping of each of a plurality of elements found at column 15, lines 48-67 through column 16, lines 1-13, mapping 9C-18 to 8B-20, column 18, lines 1-17, column 19, lines 62-67, and column 20, lines 35-67 teaches Applicants' second element of claims 1, 18 and 24. As described in Sacks column 16, lines 13-27, hKey and hNode are a unique composite key for each of the mapped tables, and are unique identifiers of the hierarchical database rows. However, there is no disclosure in Sacks as in Applicants' claims of mapping elements in the hierarchical data entity to information in a relational dataset in a relational database, including, for each compound element, specifying a database command, executing a database command, receiving database field names from the relational database, and adding the database field names to the compound element. There is also no disclosure in Sacks as in Applicants' claims, including, for each simple element, selecting a database field name in a parent element corresponding to the simple element, and specifying a data transformation algorithm associated with the simple element. None of the cited passages in Sacks identify every element of the claimed invention, arranged as in the claim.

Regarding the third element of independent claims 1, 18 and 24 (previously presented), there is no teaching or suggestion in the Sacks reference for "transforming the relational dataset information into corresponding mapped elements in the hierarchical data entity to form a hierarchical data structure". Applicants are unable to find any disclosure in the Sacks reference of transforming dataset information into a hierarchical data entity to form a hierarchical data

structure, as described in Figure 8 of Applicants' invention. The passage in Sacks cited by the Office describe children in a given row of a table that have the same value as the composite key hKey, and have an hNode string that is composed of the hNode string of the parent node. This passage bears no relation to any element of Applicants' claimed invention.

Regarding the fourth element of independent claims 1, 18 and 24 (previously presented), there is no teaching or suggestion in the Sacks reference for "accessing data from the hierarchical data structure corresponding to the relational dataset information in the relational database". The passage in Sacks cited by the Office describe SQL expressions for generating hierarchical views in relation to composite keys hKey and h Node.

Regarding the rejection of independent claim 32 (previously presented), there is no teaching in the Sacks reference that identifies the elements of Applicants' claim 32. As recited above, "Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim." The elements of claim 32 "arranged as in the claim" are completely lacking in the cited reference of Sacks. Regarding the first element of Applicants' claim 32, "a hierarchical data structure having a plurality of simple and compound elements stored in the memory", there is no disclosure of this element in the cited Sacks passage (column 5, lines 32-41), which discloses relational and hierarchical database management systems. Regarding the second element of claim 32, "database commands embedded in the compound elements for accessing information in a relational database", there is no disclosure of this element in the cited Sacks passage (column 17, lines 66-67 and column 18, lines 1-10), which discloses seven tables of Figure 9 from the nine rows of the seven tables of Figure 8B. Regarding the third element of claim 32, "tabular datasets created in the memory for storing the accessed information from the relational database", there is no disclosure of this

element in the cited Sacks passage (column 20, lines 55-63), which discloses inserting

hierarchical key data (for indexing) into a new root row and saving the new row of key data in

the relationship database management system. Regarding the fourth element of claim 32,

"mappings of the plurality of simple and compound elements in the hierarchical data entity to

information in relational datasets contained in the relational database if a root element is present,

comprising for each compound element, means for specifying a data source, specifying a

database command, executing the database command, receiving database field names from the

relational database, and adding the database field names to the compound element, for each

simple element, means for selecting a database field name in a parent element corresponding to

the simple element, and specifying a data transformation algorithm associated with the simple

element". The cited passages of Sacks (column 15, line 48-67, column 16, lines 1-13, column 18,

lines 1-17, and column 20, lines 35-67) describing Figures 8B, 9A and 10, do not disclose this

fourth element of claim 32, but merely describe the relationship between Figure 8B and Figure

9A. Regarding the fifth element of claim 32, "transformations of the relational dataset

information into corresponding mapped elements in the hierarchical data entity to form a

hierarchical data structure", there is no disclosure of this element in the cited passage of Sacks

(column 16, lines 46-60 and column 16, lines 54-60), which describes Figure 9. Regarding the

sixth element of claim 32, "a relationship between the elements of the hierarchical data structure

and the tabular datasets", there is no disclosure of this element in the cited passage of Sacks

(column 25, lines 7-20), which describe Figures 14 A and 14B. There is no disclosure of these

elements in Sacks. Therefore, the rejection of claim 32 should be withdrawn.

Since every element of the claimed invention, arranged as in the independent claims 1,

18, 24 and 32 (previously presented), is not found in the single prior art reference of Sacks,

Sacks does not anticipate Applicants' independent claims 1, 18, 24 and 32. Therefore the rejection of claims 1, 18, 24 and 32 should be withdrawn.

Discussion of Dependent Claim Rejections Under 35 U.S.C. § 102(a)

Furthermore, claims 2-5, 7, 9, and 11-17 are either directly or indirectly dependent upon independent claim 1, claims 19-22 are either directly or indirectly dependent upon independent claim 18, claims 25, 26, 28, and 30 are either directly or indirectly dependent on independent claim 24, and claims 33 and 34 are directly dependent upon independent claim 32. These dependent claims incorporate all the limitations of the independent claims upon which they depend while providing further unique and non-obvious recitations. Since the rejections of claims 1, 18 and 24 are not supported by the Sacks disclosure, the rejections of these dependent claims as anticipated are also not supported by the Sacks reference and should be withdrawn.

Regarding the rejection of dependent claims 2, 4, 19, 21, 25 and 26 (original), there is no teaching in the Sacks disclosure of the elements of these claims. The trier of facts must identify the elements of the claims, determine their meaning in light of the specification and prosecution history, and identify corresponding elements disclosed in the allegedly anticipating reference. The identification of the elements of these claims reveals that the elements include a hierarchical map structure and a hierarchical data entity. A hierarchical map structure is described in relation to Applicants' Figure 2, where compound elements include attributes of an Entity Path, Database Name, Database Command, and Database Fields. Simple Elements shown in Figure 2 include Entity Path and Mapped Fields. There are no corresponding compound elements disclosed in Sacks that include an Entity Path, Database Name, Database Command, and Database Fields. Nor are there corresponding simple elements disclosed in Sacks that include Entity Path and Mapped Fields. Since the element of a hierarchical map structure cannot be fond in Sacks, the

rejection of these claims should be withdrawn. Furthermore, a hierarchical data entity is described in relation to Applicants' Figure 3, where compound elements include attributes of an Element Name, Database Name, Database Command, and Database Fields. Simple Elements shown in Figure 3 include Element Name and Mapped Fields. There are no corresponding compound elements disclosed in Sacks that include an Element Name, Database Name, Database Command, and Database Fields. Nor are there corresponding simple elements disclosed in Sacks that include Element Name and Mapped Fields. Since the element of a hierarchical data entity cannot be fond in Sacks, the rejection of these claims should be withdrawn. Contrary to the passages cited by the Office, there is no disclosure in Sacks of a hierarchical map structure or a hierarchical data entity, as disclosed by Applicants. For an example of the patentable distinctions between Applicants' invention and the Sacks reference, compare Figures 1A-1E and Figures 9A and 9C cited by the Office with Applicants' Figures 2 and 3 that reflect the embodiment of claims 2, 4, 19, 21, 25 and 26. The comparison reveals significant patentable differences in the disclosed attributes of Sacks hierarchical elements and the attributes of the hierarchical elements disclosed and claimed by Applicants. Therefore, the rejection of claims 2, 4, 19, 21, 25 and 26 should be withdrawn.

Regarding the rejection of claims 3 and 20 (original), a comparison of Applicants' Figure 3 with the Sacks reference Figure 9A-9C cited by the Office reveal patentably distinguishable features of Applicants claim 3 and 20. Therefore, the rejection of claims 3 and 20 should be withdrawn.

Regarding the rejection of claims 5 and 22 (original), there is no disclosure in the Sacks disclosure, and particularly with respect to Sacks' Figures 1B-1D, of identifying each of the

plurality of elements by an entity path referencing all parent elements in the entity path. Therefore, the rejection of claims 5 and 22 should be withdrawn.

Regarding the rejection of claims 7 and 28 (previously presented), there is no disclosure of identifying an element name and mapped fields in each simple element in Figures 1D-1E or in column 9, line 1-15 of the Sacks reference, as cited by the Office. Therefore, the rejection of claims 7 and 28 should be withdrawn.

Regarding the rejection of claims 9 and 30 (previously presented), there is no disclosure of claims 9 and 30 of identifying an element name, a database name, a database command, and database fields in each compound element in Figures 1E or in column 9, lines 1-15 of the Sacks reference, as cited by the Office. Therefore, the rejection of claims 9 and 30 should be withdrawn.

Regarding the rejection of claim 11 (original), there is no teaching in the Sacks reference that identifies the elements of Applicants' claim 11, which claims the step of mapping the plurality of elements recited in claim 1. To illustrate this lack of teaching or suggestion, the following is a comparison of each element of claim 11 with the passage in Sacks cited by the Office that allegedly includes each element of claim 11. The first element of Applicants' claim 11 recites, "reading the hierarchical data entity" and the cited Sacks passage (column 11, lines 34-36, Figure 4) reads, "The upper third of FIG. 4, Specify Hierarchical Database 4-10, denotes the process where the developer enters data into the fields of tables defined in FIG. 3A." The first element recites a first step of a computer process of reading an existing hierarchical data entity, while the cited passage recites a manual definition of fields defined in FIG. 3A. The first element of Applicants' claim 11 is patentably distinguishable from the Sacks passage cited by the Office. Furthermore, the fields shown in FIG. 3A bear no relationship or meaning with regard

to Applicants' claimed and disclosed invention. The second element of Applicants' claim 11 recites, "determining if a root element is present" and the cited Sacks passage (column 11, lines 44-46) reads, "4-16 Specify Root and Child Conditions - This specifies the conditions, referred to as root conditions and child conditions 3A-12 for adding root and child rows." Applicants' second element of claim 11 is patentably distinguishable from the Sacks passage cited by the Office. The third element of Applicants' claim 11 recites, "ending the mapping process if no root element is present" and the cited Sacks passage (column 11, lines 44-46) reads, "4-16 Specify Root and Child Conditions - This specifies the conditions, referred to as root conditions and child conditions 3A-12 for adding root and child rows." Applicants' third element of claim 11 is patentably distinguishable from the Sacks passage cited by the Office. The fourth element of Applicants' claim 11 recites, "mapping each compound element of the plurality of elements if a root element is present" and the cited Sacks passage (column 11, lines 49-51) reads, "4-18 Specify Tables and Fields - This block specifies the tables 3A-10 and their fields 3A-14, which store the rows of data of the hierarchical database." Applicants' fourth element of claim 11 is patentably distinguishable from the Sacks passage cited by the Office, since there is no suggestion of the conditional statement "mapping compound elements if a root element is present" in the cited Sacks passage. The fifth element of Applicants' claim 11 recites, "mapping each simple element of the plurality of elements if a root element is present" and the cited Sacks passage (column 10, line 35-46) describes Figure 3A of Sacks with no disclosure of the conditional statement "mapping each simple element of the plurality of elements if a root element is present". Therefore, the fifth element of Applicants' claim 11 is patentably distinguishable from the Sacks passage cited by the Office. Since every element of Applicants

claim 11 is distinguishable from the passages of Sacks cited by the Office, the rejection of

Applicants claim 11 should be withdrawn.

Furthermore, with regard to claim 11 (original), which is a method claim for mapping

each of a plurality of elements, "Anticipation requires the presence in a single prior art reference

disclosure of each and every element of the claimed invention, arranged as in the claim." None

of the elements of claim 11 are found in the Sacks reference "arranged as in the claim" to

accomplish a mapping process. On this basis, the rejection of claim 11 should be withdrawn.

Regarding the rejection of claim 12 (original), there is no teaching in the Sacks reference

that identifies the elements of Applicants' claim 12, which claims the step of mapping each

compound element recited in claim 11. As recited above, "Anticipation requires the presence in a

single prior art reference disclosure of each and every element of the claimed invention, arranged

as in the claim." The elements of method claim 12 "arranged as in the claim" are completely

lacking in the cited reference of Sacks. There is no disclosure in the Sacks reference of selecting

a compound element, specifying a data source, specifying a database command expression,

executing the database command expression, receiving a dataset containing fieldnames from the

data source, adding the dataset fieldnames to a dataset field list in the compound element for

enabling simple elements to map to the information in the dataset, and repeating the above steps

for each compound element. Therefore, the rejection of claim 12 should be withdrawn.

Regarding the rejection of claim 13 (original), there is no teaching in the Sacks reference

that identifies the elements of Applicants' claim 13, which claims the step of mapping each

simple element recited in claim 11. As recited above, "Anticipation requires the presence in a

single prior art reference disclosure of each and every element of the claimed invention, arranged

as in the claim." The elements of method claim 13 "arranged as in the claim" are completely

lacking in the cited reference of Sacks. There is no disclosure in the Sacks reference of selecting a simple element, selecting a source dataset fieldname corresponding to the simple element in a dataset field list of a parent element, specifying data transformation algorithms associated with the simple element, and repeating the above steps for each simple element. Therefore, the rejection of claim 13 should be withdrawn.

Regarding the rejection of claims 14-16 (original), there is no teaching in the Sacks reference that identifies the elements of Applicants' method claims 14-16, which claims the step of transforming the relational database information recited in claim 1. As recited above, "Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim." The elements of method claims 14-16 "arranged as in the claim" are completely lacking in the cited reference of Sacks. There is no disclosure of these steps in Sacks. Therefore, the rejection of claims 14-16 should be withdrawn.

Regarding the rejection of claims 33 and 34 (original), claims 33 and 34 are directly dependent upon independent claim 32, which has been shown above to be patentable. These dependent claims incorporate all the limitations of the independent claim 32 upon which they depend while providing further unique and non-obvious recitations. Since the rejection of claims 32 is not supported by the Sacks disclosure, the rejections of these dependent claims 33 and 34 as anticipated are also not supported by the Sacks reference and should be withdrawn.

Summary

The responses detailed above rebut the assertions by the Office of anticipation of Applicants' invention, since all the elements of Applicants' claimed invention are not found in the cited reference of Sacks. The responses substantiate the novelty of claims 1-5, 7, 9, 11-22, 24-26, 28, 30 and 32-34 of Applicant's specification over the cited reference. Since the rejections

are unsupported for failure to find all Applicants' claim limitations in the Sacks reference, the rejections should be withdrawn.

Applicants have made a diligent effort to distinguish the present invention over the referenced art and to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Douglas D. Russell, Applicants' Attorney at 512-338-4601 so that such issues may be resolved as expeditiously as possible. For these reasons, and in view of the above amendments, this application is now considered to be in condition for allowance and such action is earnestly solicited. Reconsideration and further examination is respectfully requested.

Respectfully Submitted,

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Date

Douglas D. Russell, Reg. No. 40,152
Attorney for Applicants

TAYLOR RUSSELL & RUSSELL, P.C.
4807 Spicewood Springs Road
Building 2 Suite 250
Austin, Texas 78759
Tel. 512-338-4601
Fax. 512-338-4651
Email: drussell@russell-law.com